SAF-RC-001 Industrial Hygiene Sampling FINAL DATA

NO DISTRIBUTION REQUIRED

COMMENTS:

SDG 06I-0182-01 SAF-RC-001

Rad only X Chem only Rad & Chem

X Complete

Partial

300 Area 314 Pad





Cover Page

Page 1 of 7



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Report Identification Number: 06I-0182-01

Subcontract Number:

0000X-BO-G0058-B-Mod#4

Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby

Laboratory Identification Number: DCHM

SAF#: RC-001 / R31400 J452

Payroll#: 8C278

Sample Information

| Sample Date | Customer Sample Number | Laboratory Sample Number | Method | Analytical Batch Identification | Sample Matrix |
|-------------|------------------------------|--------------------------|------------|---------------------------------------|---------------|
| 17 Jan 2006 | J10X88 | 06I01521 | NMAM 7300M | G060K00H | G WIPE |
| 17 Jan 2006 | J10X91 | 06I01522 | NMAM 7300M | G060K00H | G WIPE |
| 17 Jan 2006 | J10X90 | 06I01523 | NMAM 7300M | G060K00H | G WIPE |
| 17 Jan 2006 | J10X92 | 06I01524 | NMAM 7300M | G060K00H | G WIPE |

I certify that this electronic image and all hardcopies produced from this image accurately represent the data and are in compliance with the contract specific requirements, both technically and for completeness, other than the conditions detailed above or in the sample data package narrative. Release, by submission through email, the data contained in this electronic image and the computer-readable EDD (as applicable), has been authorized by the laboratory Manager or the Manager's designee.

Phone: (801) 266-7700

FAX: (801) 268-9992

Name: Lisa M. Reid Title: Chemist

Date: January 23, 2006





Case Narrative Page

Report Identification Number: 06I-0182-01

Subcontract Number: 0000X-BO-G0058-B-Mod#4

Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby

Laboratory Identification Number: DCHM

SAF#: RC-001 / R31400 J452

Payroll#: 8C278

General Set Information: There are 4 samples in set 06I-0182-01 and 4 samples in set 06I-0183-01 which were analyzed for beryllium on Ghost Wipe. No problems were encountered with the receipt of these samples and no contact with the CTR was required.

Method Summary: Samples were transferred to 50 ml centrifuge tubes and digested in the presence of 5 mL of nitric acid and 5 mL of ASTM Type II water. Samples were digested in a hot block set at 110°C for 60 minutes. Samples were then diluted to a 25 mL volume with ASTM Type II Water. Samples were shaken and delivered for ICP analysis.

Sample Preparation: All samples were prepared in accordance with DCL SOP "IH-AN-021" and NIOSH method NMAM 7300 modified for hot block digestion.

Holding Times: The holding times were met for both sample preparation and analysis.

Instrument Calibration: Instrument calibration was performed in accordance with NIOSH method NMAM 7300.

Initial and Continuing Calibration Verification Analysis: Beryllium recoveries in all Initial Calibration Verification (ICV) and Continuing Calibration Verification (CCV) samples are within the quality control limits of +/- 10%.

Initial and Continuing Calibration Blank Analysis: No beryllium results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Contract Required Detection Limits (CRDL) of 0.01 ug/sample.

Method Blank Analysis: No beryllium was found in any of the media blank samples above the Contract Required Detection Limit (CRDL).

Dilution(s): None.

Laboratory Control Sample and Duplicate Analysis: One Laboratory Control Sample (LCS) and one Laboratory Control Sample Duplicate (LCSD) were prepared and analyzed with the sample batch. The LCS results were within the control limits of +/- 20%. The Relative Percent Difference (RPD) between the LCS and the LCSD were within the control limit of 20%.

DataChem Laboratories, Inc. 960 West Levoy Drive Salt Lake City, Utah 84123-2547 Phone: (801) 266-7700

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Case Narrative Page

Replicate Analysis: One sample in this batch was replicated. The RPD between the sample and the replicate was within the control limit of 20%. If the result of the sample or replicate is below the CRDL, replicate analysis is negligible.

Flagging Codes: None

Nonconformance/Corrective Action Report (NC/CAR): N/A

Sample Calculation: The final results are calculated by the following equation:

Final result for aqueous samples (μ g/sample) = (A) x (B) x (C)

Where:

A = Analyte concentration from instrument determination ($\mu g/L$)

B = Concentration factor from sample preparation

= <u>Final Volume of Digestate (L)</u> Sample

C = Dilution performed at time of analysis

Example Calculation: $(1 \mu g/L) \times (0.025 L/sample) \times (1) = 0.025 \mu g/sample$

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Miscellaneous Comments: None



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Report Page

Report Identification Number:

06I-0182-01

Subcontract Number:

0000X-BO-G0058-B-Mod#4

Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby

Phone: (801) 266-7700

FAX: (801) 268-9992

Laboratory Identification Number: DCHM

SAF#: RC-001 / R31400 J452

Payroll#: 8C278

| Customer Sample Number | Laboratory Sample Number | Date Analyzed | Berylliun µg/sampl | | | | | |
|------------------------|--|------------------|-----------------------|---|--|--|--|--|
| J10X88 | 06I01521 | 19 Jan 2006 | < 0.01 | U | | | | |
| J10X91 | 06I01522 | 19 Jan 2006 | < 0.01 | U | | | | |
| J10X90 | 06I01523 | 19 Jan 2006 | < 0.01 | U | | | | |
| J10X92 | 06I01524 | 19 Jan 2006 | < 0.01 | U | | | | |
| | 0 | .01 | | | | | | |
| R | Limit of Detection (LOD) Required Detection Limit (RDL) | | | | | | | |

U - Parameter not detected above LOD.

J - Parameter between LOD and RDL.



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QC Summary Page

Report Identification Number: 06I-0182-01

Subcontract Number: 0000X-BO-G0058-B-Mod#4

Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby

Laboratory Identification Number: DCHM

SAF: RC-001 / R31400 J452

Payroll#: 8C278

Batch ID: G060K00H

| OC Sample ID | QC Type | Analyte | Units | Result | Parent Result | Target | Percent Rec. | Relative Percent Diff. |
|--------------|------------|-----------|-----------|--------|------------------|--------|-----------------|------------------------------|
| BL-240174-1 | MB | Beryllium | μg/sample | ND | NA | NA | NA | NA |
| QC-240174-1 | LCS | Beryllium | μg/sample | 10.8 | NA | 10.0 | 108. | NA |
| QD-240174-1 | LCSD | Beryllium | μg/sample | 11.1 | 10.8 | 10.0 | 111. | 2.84 |

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MB - Method Blank

LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MSD - Matrix Spike Duplicate

LD - Laboratory Duplicate

NA - Not Applicable

ND - Parameter not detected above LOD

LCS, LCSD Percent Rec. = (Result / Target) * 100.0

MS, MSD Percent Rec. = ((Result – Parent) / Target) * 100.0

LCS, LCSD Relative Percent Diff. = ((|LCS - LCSD|) / ((LCS + LCSD)/2.0)) * 100.

MS, MSD Relative Percent Diff. = ((|MS - MSD|) / ((MS + MSD)/2.0)) * 100.

LD Relative Percent Diff. = ((|Parent - LD|) / ((Parent + LD)/2.0)) * 100

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| Stupped To: Datachen Sqlt Lake City | | 300 A | 300 Area 314 Rad Wipe Sample Media: Ghost Yes No Other | | ANALYSIS METHOD (SPECIFIC): | | Method of Shipment Fed | | | Ex | | | |
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WCH-SH-202 (08/29/2005)



CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST Data Turnaround Collector: Project Coordinator Company Contact Telephone No. Payroll #:

8 C 2 7 8

Type of Sample: 531-1229 Joan H. Kessner Denise A. Pitts and Henry W. Ruby SAF No. Sampling Location SPECIAL INSTRUCTIONS Standard RC-001 All relevant COAs must be provided: R31400 J452 Method of Shipment 300 Area, 314 Pad ANALYSIS METHOD (SPECIFIC): Shipped To: Datachem Bill of Lading/Air Bill No. Wipe Sample Media: NIOSH 7300 Ghost ☑ Yes ☐ No Salt Lake City 8541 9337 5330 POSSIBLE SAMPLE HAZARD/RUMARKS MATRIX Be A -- AIR Preservation (i.e., cooling WI - WIPE Special Handling and/or Storage No No No required, etc.) No No No No No des X OTHER SAMPLE ANALYSIS Cd CdLead Ashestos Lead Beryllium Beryllium VOLUME (Lier Wipe Wipe Airbonie Wipe Airborne Airborne Airborne Mold SAMPLE NO. MATRIX SAMPLE DATE Comments Area 100 cm2 X J10×88 1-17-06 WI 1.00 JIOX 91 1-17-06 1.00 J10 X90 ωT 1-17-06 ωI J/0x92 1-17-06 FIELD SAMPLE COPY

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Page ____ of ____

*Enter on line below the first Sample Number from Page One: